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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,480	01/23/2004	Naohiko Otake	247954US6	4939

22850 7590 01/07/2009

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EXAMINER	
AMADIZ, RODNEY	

ART UNIT	PAPER NUMBER
2629	

NOTIFICATION DATE	DELIVERY MODE
01/07/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/762,480	OTAKE ET AL.	
	Examiner	Art Unit	
	RODNEY AMADIZ	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 October 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 4-9* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 4-9* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 5 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh (USPGPUB 2005/0162395—hereinafter Unruh) in view of Dow et al. (US. Patent 7,038,717--hereinafter "Dow"), Nakae et al. (USPGPUB 2004/0166829—hereinafter "Nakae") and Mak (USPGPUB 2004/0085289—hereinafter "Mak").

As to **Claim 1**, Unruh teaches an information processing apparatus ***(Fig. 1, 1)***, comprising: a display ***(2)***; a keyboard including alphanumeric keys ***(3)*** each allocated to one character in a first input mode ***(the Examiner interprets the first input mode to be the telephone mode where number characters are used)***, wherein at least one of the alphanumeric keys of the keyboard is allocated to more than one character in the second input mode ***(Fig. 1, reference number 3 and Pg. 4, ¶' 60 and 61; the Examiner interprets the second input mode as the text mode)*** and is provided on a second side of the apparatus ***(Fig. 1, note that the alphanumeric keys are on the second side (lower half) of the apparatus)***; at least one cursor key ***(Fig. 1, note up arrow and down arrow)*** configured to select a word generated by a predetermined program ***(See Figs. 10-13 and Pg. 6, ¶'s 74-75)***, wherein the at least one cursor key is provided on a first side of the apparatus, opposite to the second side, between the

display and the keyboard ***(Fig. 1, note that the cursor keys are on the top side of the apparatus and note the position of arrow keys in relation to the display and keyboard)***; a common button ***(space character)*** configured to be a determination button to determine the word selected from candidates appearing on the display according to a number of times a selected alphanumeric key is pressed in a second input mode while the predetermined program is activated ***(Figs. 7-13 and Pg. 5, ¶ 63 and Pgs. 5-6, ¶'s 71-75—note that the space character is used as the determination button. Also note that Unruh is silent as to the location of the space character)***.

Unruh fails to teach the common button configured to be an activation button to activate a predetermined program. Examiner cites Dow et al. to teach a common button configured to be both an activation button to activate a predetermined program and a determination button ***(Fig. 1A, Reference Numbers 26, 34, 36 or 38 and Col.3, lines 37-45 and Col. 9, lines 27-40)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate button reuse as taught by Dow in the information processing apparatus taught by Unruh so that the apparatus may be faster and more convenient to use due to the lack of an enter button ***(Dow et al.—Col. 9, lines 35-37)***.

Unruh, as modified by Dow, fails to teach that the common button is provided on a first side of the apparatus between the display and the keyboard. Examiner cites Nakae to teach a program activation button ***(Fig. 1A, 14c and 14g)*** and determination keys ***(14d)*** located on a first side of the apparatus between the display ***(13)*** and the

keyboard ***(14f—See Fig. 1—note that both the activation keys 14c, 14g and determination keys 14d constitute a common key as described in the claim limitation)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to place the common button between the display and the keyboard as taught by Nakae in the information processing apparatus taught by Unruh and Dow, so as to make it convenient for the user to find and comfortable for the thumb to access.

Unruh, as modified by Dow and Nakae, fails to teach a pointing device configured to move a pointer appearing on the display in a desired direction, wherein the pointing device is adjacent to the common button. Examiner cites Mak to teach a pointing device ***(Fig. 3, joystick 310)*** configured to move a pointer ***(110)*** appearing on the display in a desired direction ***(Pg. 3, ¶'s 37-38)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to include a pointing device as taught by Mak in the information processing apparatus taught by Unruh, Dow and Nakae, in order to add functionality to the device as well as to obtain greater control of the pointer.

The combination of Unruh, Dow and Nakae teaches that the common button is between the display and the keyboard and thus teaches that the common button is arranged outside of the perimeter of the plurality of cursor keys ***(Unruh—Fig. 1, note "up" and "down" arrows)***. Unruh, as modified by Dow and Nakae; however, fails to teach that the cursor keys are arranged around a perimeter of the pointing device and the common button is arranged outside a perimeter of the plurality of cursor keys.

Examiner cites Mak to teach a plurality of cursor keys ***(Mak—Fig. 3, 306a, 306b, 308a and 308b)*** arranged around a pointing device ***(Fig. 3, 310)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to replace the cursor keys taught by Unruh, as modified by Dow and Nakae with the cursor keys taught by Mak in the arrangement shown by Mak (i.e. at the perimeter of the pointing device) in order to add left and right cursor keys as well as to make it easier for the user to use the same finger to navigate the display.

As to **Claim 5**, Unruh teaches at least one auxiliary input key ***(Fig. 1, Reference Number 3, Key 2)*** configured to input a first character when the predetermined program is not activated ***(inputs the character "2")*** and to input a second character when the predetermined program is activated ***(inputs the characters "a", "b' or "c")***.

As to **Claim 7**, all of the claim limitations have been addressed with respect to Claim 1. ***(See Claim 1 and note that the combination of Unruh, Dow, Nakae and Mak, yields the structure of Claim 7)***.

3. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae and Mak as applied to claims 1, 5 and 7 above, and further in view of Harada et al. (U.S. Patent 6,0726476—hereinafter "Harada").

As to **Claim 4**, Unruh, teaches a confirmation key ***(space character)*** configured to confirm an item selected with the pointing device or one of the plurality of cursor keys ***(Figs. 7-13 and Pg. 5, ¶ 63 and Pgs. 5-6, ¶'s 71-75—note that the space character is used as the confirmation button)***. Unruh as modified by Dow, Nakae and Mak,

fails to teach a switch button configured to switch a direction of the display, wherein the switch button is adjacent to the cursor key. Examiner cites Harada to teach a switch button ***(Fig. 9, Reference Number 65B)*** configured to switch a direction of the display ***(Col. 11, lines 19-30)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a switch button as taught by Harada in the information processing apparatus taught by Unruh, Dow, Nakae and Mak in order to display an image in portrait or landscape ***(Col. 13, lines 17-21)***.

Unruh, as modified by Dow, Mak and Harada, fails to teach that the common button, the switch button, and the confirmation key form a ring that surrounds the plurality of cursor keys and the pointing device. Examiner cites Nakae to teach a plurality of keys ***(Fig. 1A, 14a, 14c, 14e, 14g and 14h)*** forming a ring that surrounds a plurality of cursor keys ***(14b)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use the teachings of Nakae, that is, arranging keys to form a ring that surrounds a plurality of cursor keys, in the information processing apparatus taught by Unruh, as modified by Dow, Mak and Harada, in order to facilitate access to certain keys by providing limited movement between the cursor and the key of choice.

4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae and Mak as applied to claims 1, 5 and 7 above, and further in view of Shiono et al. (USPGPUB 2005/0188001—hereinafter "Shiono") and Fleck et al. (U.S. Patent 6,977,811—hereinafter "Fleck").

As to **Claim 6**, Unruh, as modified by Dow, Nakae and Mak, fails to teach a mouse button set, including a center button configured to scroll a screen appearing on the display; a left button configured to operate as a first function button; and a right button configured to operate as a second function button. Examiner cites Shiono to teach a mouse button set ***(Fig. 3, Reference Numbers 23A-C)***, including a center button configured to scroll a screen appearing on the display ***(Fig. 3, Reference Numbers 23C and Pg. 2, ¶ 47)***; a left button configured to operate as a first function button ***(23A and Pg. 2, ¶ 47)***; and a right button configured to operate as a second function button ***23B and Pg. 2, ¶ 47)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of a mouse button set as taught by Shiono in the information processing apparatus taught by Unruh, as modified by Dow, Nakae and Mak, in order to add functionality to the apparatus.

Unruh, as modified by Dow, Nakae, Mak and Shiono, also fails to teach that the mouse button set is located near an opposite end from the common button and the cursor key in an axial direction of a hinge pin between the display and the keyboard. Examiner cites Fleck to teach an information processing apparatus to teach that a mouse button set ***(Fig. 3, 310 and 312)*** is located at an opposite end from a hot button ***("desktop" button—similar to a common button)*** and cursor keys ***(302, 304, 306 and 308)*** in an axial direction of a hinge pin ***(See Fig. 1)*** between the display and the keyboard ***(See Fig. 1)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to arrange the mouse button opposite the common

button and cursor keys as taught by Fleck in the information processing apparatus taught by Unruh, as modified by Dow, Nakae, Mak and Shiono, in order to add functionality to the apparatus when using the left hand to operate the display ***(Col. 6, lines 8-17)***.

(Please note that although Unruh is described as a mobile phone that it is not limited only to mobile phones. Other devices such as PDA's and computers may be used (Unruh—Pg. 4, lines 1-6). Therefore the combination of Unruh with Fleck is appropriate.).

5. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae and Mak as applied to claims 1, 5 and 7 above, and further in view of Davies (USPGPUB 2002/0028697--hereinafter "Davies").

As to **Claim 8**, Unruh teaches that in the second input mode, a single letter is selected by the at least one of the alphanumeric keys allocated to more than one character, and in response to the single letter selected by the at least one of the alphanumeric keys, the predetermined program generates a list including a single word and a group of words configured to be selected by the common button ***(Unruh—Fig. 7 and Pg. 5, ¶ 71, note that the "6 mno" key is activated and in response the predetermined program generates a list including a single word "in" and a group of words, "go" and "im", configured to be selected by the common button)***. Unruh, as modified by Dow, Nakae and Mak, however, fails to teach that the common button is configured to select more than one word from the list at a time. Examiner cites

Davies to teach a list of phrases that may be selected by the user ***(Pg. 3, ¶ 35-39)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to also include phrases as taught by Davies in the group of words provided on the information processing apparatus taught by Unruh, as modified by Dow, Nakae and Mak in order to provide the user with more word options which would speed up the typing process.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unruh, Dow, Nakae and Mak as applied to claims 1, 5 and 7 above, and further in view of Blumberg (U.S. Patent 6,799,303--hereinafter "Blumberg").

As to **Claim 9**, Unruh, as modified by Dow, Nakae and Mak, fails to teach that the alphanumeric keys include individual keys corresponding to each letter in the English alphabet in the first input mode. Examiner cites Blumberg to teach alphanumeric keys including individuals keys corresponding to each letter in the English alphabet in the first input mode ***(See Fig. 31a and 31b)***. At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to incorporate the use of English alphabet letterings in the first input mode as taught by Blumberg in the information processing apparatus taught by Unruh, as modified by Dow, Nakae and Mak, in order to add functionality by increase typing speed ***(Blumberg—See Abstract)***.

Response to Arguments

Applicant's arguments filed October 6, 2008 have been fully considered but they are not persuasive. The Applicant argues that "Mak does not disclose or suggest that 'the at least one cursor key includes a plurality of cursor keys arranged around a perimeter of the pointing device and the common button is arranged outside a perimeter of the plurality of cursor keys,' as recited in amended Claim 1.

Instead, as can be seen in Figure 3 of Mak, there are no keys arranged outside of a perimeter of the directional keys 306a-306b and 308a-308b. Further, as can be seen in Figure 1 of Unruh, there is not enough unused space on the keypad 3 of Unruh to add the pointer 310 and the directional keys 306a-306b and 308a-308b of Mak. Further, even if the pointer 310 and the directional keys 306a-306b and 308a-308b of Mak could be added to the keypad 3 of Unruh, a common button would not necessarily be arranged outside a perimeter of the directional keys 306a-306b and 308a-308b. Accordingly, Applicants respectfully submit that the combination of the pointer 310 and the directional keys 306a-306b and 308a-308b described in Mak with the telephone 1 described in Unruh as modified by Dow and Nakae is not proper and the rejection should be withdrawn. However, even assuming the rejection is proper, it is respectfully submitted that the combination does not disclose or suggest every feature recited in amended Claim 1. Thus, Applicants respectfully request that the rejection of Claim 1, and all claims dependent thereon, as unpatentable over Unruh, Dow, and Nakae, and further in view of Mak be withdrawn."

The Examiner respectfully disagrees. Mak clearly teaches that the cursor keys 306a-306b and 308a-308b are arranged around the perimeter of the pointing device 310 (Mak—Fig. 3). Furthermore, Unruh was modified with Dow to teach a common button. Unruh, however, did not teach a placement for this common button. The Examiner then used Nakae to teach that it is well-known to place the common button between a display and a keyboard (Nakae—Fig. 1a). This teaching was used to modify Unruh and Dow. The combination of these three references results in the device taught by Unruh (Fig. 1) with a common button between the display and the keyboard. Lastly, the Examiner combined the combination of Unruh, Dow and Nakae with Mak to teach cursor keys surrounding a pointing device. The cursor keys taught by Unruh were replaced with the pointing device and cursor keys taught by Mak. Since Unruh already taught that the cursor keys were located between the display and the keyboard, the logical placement of the pointer and cursor keys taught by Mak would result between the display and the keyboard. Since the common button is not a cursor key it automatically is arranged outside a perimeter of the plurality of cursor keys; hence, all the limitations of claim 1 have been addressed with the combination of Unruh with Dow, Nakae and Mak. The Applicant also argues that Unruh does not have enough unused space on the keyboard 3 of Unruh to add the pointer and cursor keys. The Examiner respectfully disagrees. Figure 1 of Unruh, teaches an open space between the display and the keyboard above the key marked "C". Furthermore, because Mak was combined with Unruh, there is no need for the up and down arrow keys, thereby adding more unused space to the device. Even if the Examiner were to agree that there is not

enough unused space to add a pointer and cursor keys, the argument could be made that the device taught by Unruh could be elongated to allow for such modifications. The Applicant also argues that a common button would not necessarily be arranged outside a perimeter of the directional keys 306a-306b and 308a-308b. The Examiner respectfully disagrees. Mak teaches that the pointer is in close proximity to the cursor keys and therefore the common button would have to be outside of the perimeter of the cursor keys. Furthermore, since the common button is not a cursor key it inherently is arranged outside a perimeter of the plurality of cursor keys.

7. Applicant's arguments with respect to claims 4 and 8 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RODNEY AMADIZ whose telephone number is (571)272-7762. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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12/30/08